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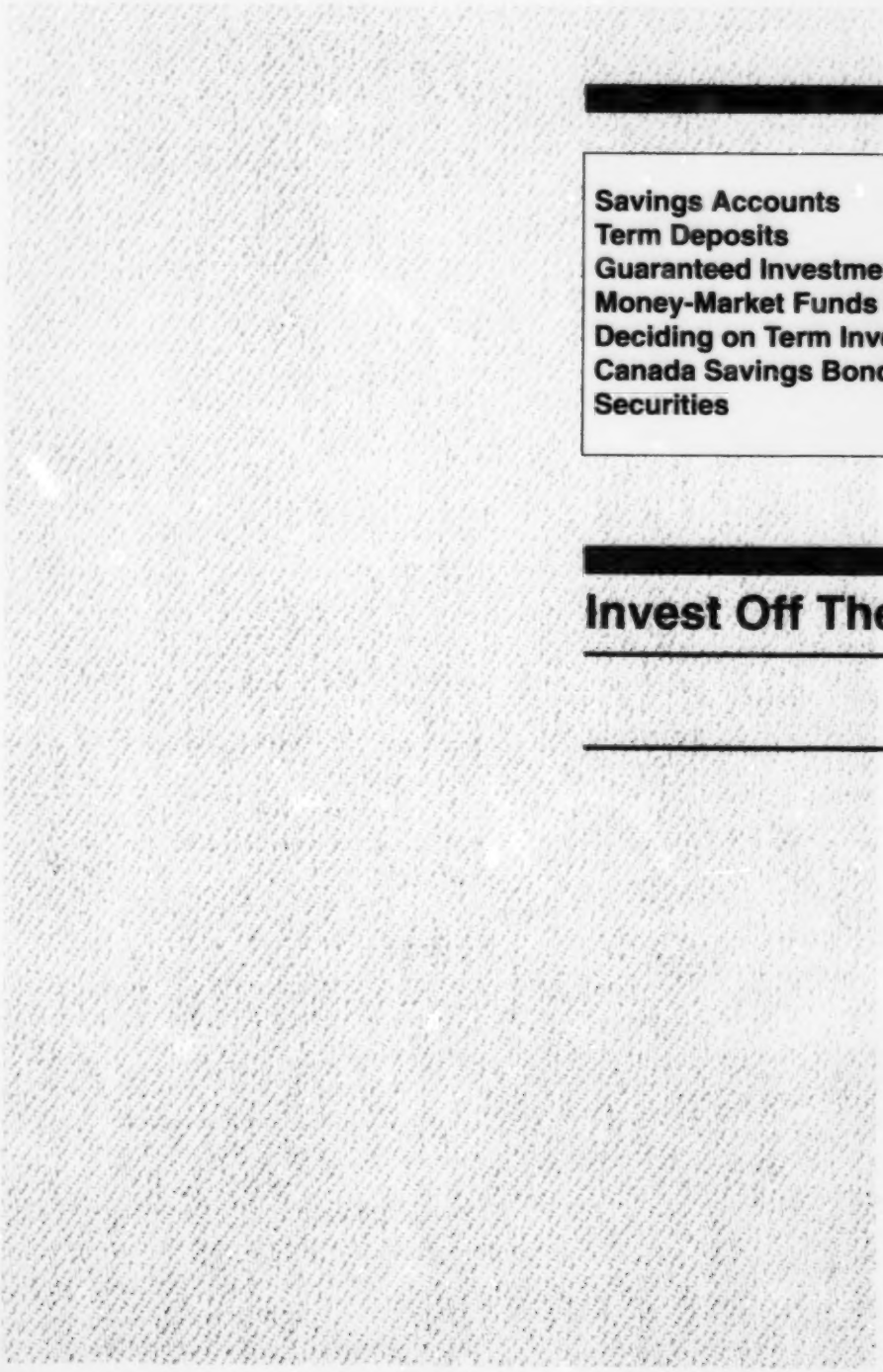

Savings Accounts
Term Deposits
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Deciding on Term Investments
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Securities

Invest Off The Farm

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Foreword

Farmers may receive large amounts of money at different times during the year or during their lifetime. The amounts and sources of money vary as well as possibilities for using the money to purchase additional farm assets and inputs or for off-farm investments, such as term deposits, securities, mutual funds, etc.

This bulletin is designed to provide an overview of what investment opportunities are available outside of farming. The bulletin does not provide enough depth to develop expertise on the various types of investments. Rather, it summarizes the major characteristics, limitations and uses of the common forms of investment.

Consult with competent professionals before making final investment decisions. Investment dealers, as well as some banks and trust companies have counsellors available. Lawyers, tax consultants, private investment consultants, accountants, farm management agrologist and trusted friends also can provide advice.

Several topics in this publication are similar to topics in the publications "Estate Planning for Farm Families" and "Managing Your Farm Income Tax Plan" produced by Saskatchewan Agriculture and Food.

This publication was prepared by the Farm Management Section of Saskatchewan Agriculture and Food. Appreciation is extended to the many resource people who provided information and those who reviewed the bulletin.

Economics Branch
Farm Management Section
Saskatchewan Agriculture and Food
July 1992

Introduction

Farmers make investment decisions in their farm business on a daily basis. Often a farmer may have extra cash that is not required to operate the farm, and can be invested elsewhere. Retired farmers, or those about to retire, must decide where to place their investment funds to provide long term security and income. This publication is designed to provide an overview of investment opportunities beyond the farm business.

There are many different types of investment opportunities other than land or other farm related investments. Whether it is a short term, medium term or long term investment, careful planning is required to ensure that the investor's objectives will be fulfilled. Always compare several investment alternatives before making a final decision.

A person's investment portfolio should include a range of investments. Each type of investment will have advantages and disadvantages. Including a range of investments in an investment portfolio will have the effect of spreading risk and attaining a range of investment characteristics.

Investment Characteristics

Earnings

The earnings or rate of return that can be expected is the primary consideration in making an investment. Earnings may be in the form of interest, dividends, capital gain or profit.

Interest is earned on investments such as savings accounts, term deposits, guaranteed investment certificates and mortgages. Dividends represent a distribution of a corporation's after-tax profit and is paid on the shares owned by an individual in that corporation.

Capital gain or loss represents the increase or decrease in the value of a capital asset after its purchase. Profit or loss is the net earnings after all expenses have been deducted from gross income in a business activity such as a rental property, a farm, retail firm, etc.

The relative rates of return (earnings) between investment alternatives should be compared on an after-tax rather than pre-tax basis as tax treatment of earnings can be different.

A successful investment is measured by the amount of income (disposable income) left after paying income tax . See Section IV for an outline of the methods that can be used to estimate after tax income.

Risk

Risk relates to the chance of loss or gain on the original capital invested and the magnitude of a potential loss or gain.

A secure investment, that is, one with a lower risk of loss of the original investment tends to have a lower level of earnings. It also tends to have a more guaranteed return (e.g. term deposit) as compared to a more risky investment (e.g. common stocks).

Risk can be minimized by having several different types of investments in your investment portfolio (your package of investments is usually referred to as your "investment portfolio"). In addition some investments are protected up to $60,000 per individual through the Canada Deposit Insurance Corporation. When purchasing an investment always determine if the investment is covered by the Canada Deposit Insurance Corporation. If not, your level of risk is increased which may affect your decision about the investment. Canada Deposit Insurance Corporation can be contacted at 1-800-461-2352.

Inflation

Inflation erodes the real value of fixed investments such as bonds, guaranteed investment certificates, insurance, mortgages, annuities and savings accounts.

Investments which increase in value during inflationary periods are preferred as their value may increase as a result of inflation. Investments such as real estate, common stocks, precious metals or other tangible assets are looked upon as an inflation hedge. Keep in mind the potential for loss of investment or capital value when considering purchase of these types of investments.

Capital Gain Potential

Capital gain is an increase in value of an investment. Investors, through the marketing system for an asset, will bid up an investment's price for many reasons. These include improved earnings from the use of the asset, anticipated inflation and general economic conditions.

In most cases, investments with the greatest capital gain potential are the most risky and should be expected to provide the investor with the greatest earnings in the long run.

Liquidity

Liquidity refers to the ease and speed with which an investment can be converted into cash. The more liquid an investment is, the more quickly it can be converted into cash.

Liquidity is a desirable characteristic in an investment, but liquid investments often earn lower rates of return.

Examples of very liquid assets are Canada Savings Bonds and savings accounts. Cash of course, is the most liquid asset. Real estate, mortgages and annuities are examples of investments which are generally not as liquid.

Cost of Investment Transactions

The cost of an investment transaction includes sales commissions, legal and accounting fees, administration fees, and brokerage fees. Transaction costs should be considered for both the initial purchase of an investment and its eventual disposal. Transaction costs may often be hidden by means of a lower stated earnings rate on the investment. For example, there is no stated fee to purchase an annuity, however, the rate of return on the annuity is lowered to cover sales commission fees.

Administration

The amount of administrative skill and time required by an investor will vary with the type of investment. Real estate investments and stocks usually require a high level of administration and management while a Canada Savings Bond requires little administration.

Personal Factors

An investor's age, attitudes to accepting risk and financial situation have a large bearing on the types of investments to be included in an investment portfolio. A person that is affluent can afford to accept more risk than one who is less affluent.

A young person can afford to accept more risk than an older person, since a young person has a greater chance of being able to start over.

Some people will concentrate on certain investments because of personal enjoyment from that endeavour. It is much like a hobby for them.

Types of Investments

Savings Accounts

Banks, trust companies and credit unions offer various types of savings accounts. These are short term investments that can readily be converted to cash (good liquidity). They are low in risk and generally provide a low to moderate rate of return.

Interest may be calculated on the minimum daily, monthly, quarterly, semi-annual or annual balance. Typically, daily interest savings accounts provide a lower rate of interest than longer term savings accounts.

Select a savings account that will maximize earnings over the year. Remember for a savings account calculated on the minimum quarterly balance, it is possible to have money in the account for more than five months without collecting interest. For example, if a deposit was made on January 10 no interest would be earned on that amount for the first quarter. Further, if the amount was withdrawn on June 20, interest would not be earned on that amount for the second quarter.

Farmers with cash surpluses for short periods of time throughout the year should have a chequing account and either a daily interest saving account or a savings account with interest calculated on the minimum monthly balance. Funds could be transferred between the chequing and savings account to maximize interest earnings over the year.

Term Deposits

Term deposits are mainly issued by banks, credit unions and trust companies. There is generally a minimum investment required such as $1,000.

Terms may be from a few days to up to five years but are normally less than a year. Interest rates are fixed for the term and are usually higher for longer terms. Interest may be payable monthly, semi-annually or annually. When comparing term deposits it is very important to compare the interest payment taking into consideration the time period of the investment.

Term deposits may be liquidated at any time, however, there is normally a penalty for doing so. Term deposits may be used as collateral when arranging for credit.

Guaranteed Investment Certificates

Guaranteed Investment Certificates (GIC-'s) are a form of term deposit. The term can be up to 5 years and is normally more than one year. The interest rate is fixed to maturity and may be calculated annually, semi-annually or quarterly.

Many GICs are insured by the Canada Deposit Insurance Corporation, which provides insurance up to $60,000 per depositor. This removes some of the risk of a GIC.

GIC's are harder to redeem before maturity than term deposits, but most companies will allow you to borrow against the certificate.

Money-Market Fund and T-Bills

Treasury bills are short-term instruments that mature in ninety-one to 180 days. They are denominated in amounts of $1,-000 and sold at a discount to face value. For example, an investor purchasing a $1,000 treasury bill with

sixty days to maturity earning an annual interest rate of 10 per cent would pay only $984.24 for the bill. Treasury bills are issued by both the federal government and provincial governments. Provincial bills usually sell at slightly higher yields, reflecting a moderately larger risk.

Treasury bills are not redeemable on demand but can be sold through an investment dealer or bank in the bond market. The value of the treasury bill will change with changing interest rates.

A money-market fund is a mutual fund that invests primarily in treasury bills and wholesale bank deposits or top quality commercial paper. You can expect to earn about two percentage points more than you would with a savings account. Treasury bills pay even more and are at least as safe as deposits. However, Treasury bills are usually acquired through securities dealers that charge a commission and require a minimum investment of at least $5,000 and often much higher. Therefore, you should compare the net interest you would receive after commissions with the savings rate or yield available on a money-market fund.

Whether a treasury bill pays a superior yield to a money-market fund depends on the amount for money invested and the commission rate charged by the investment dealer. Banks also sell treasury bills, although the commissions or service fees may prove a great deal higher than those charged by investment dealers. It pays to shop around.

Deciding on Term Investments

When deciding on a term investment, you must choose between buying a longer term certificate at the going rate or holding off and buying a short term (three or six month) certificate and hoping that the rates will move higher.

There is no reliable way to forecast such moves, particulary over the longer term. But there are some rules of thumb governing what constitutes a reasonable rate of return.

The risk-free rate - "risk-free" meaning there is no risk to capital as is the case with an insured deposit or a government guarantee - usually hovers around 3 per cent above the rate of inflation. A greater or smaller spread than 3 per cent is a reflection of expectations in the market place. Five-year GIC rates in mid-1988 were about 10 per cent when the inflation rate hovered around 4 per cent, reflecting an expectation that the inflation rate was going to move higher.

If GIC rates are less than 3 per cent above the inflation rate, you are probably better off sticking to short-term deposits and waiting for higher rates. If five-year GICs are paying 10 per cent and you expect 8 per cent inflation, keep your money in thirty-day deposits until longer interest rates move higher or until you are satisfied that inflation is abating. Conversely, if five-year rates are at 10 per cent and you expect an economic slowdown and a drop in interest rates, you might want to lock in the longer-term rate.

If you move into the short term investments because you expect rates to move up and intend to switch later to five-year investments, remember that you are speculating on the future. Central banks, such as the Bank of Canada, are responsible for setting interest rate policies and their interest rate policies can change overnight. You could find long-term rates moving lower than you expected.

Canada Savings Bonds

Canada Savings Bonds are a special type of "bond" which are issued by the Government of Canada in November of each year.

Canada Savings Bonds can be cashed at any time for the face value of the bond plus accrued interest. These bonds are a medium term investment with the feature of excellent liquidity because they can be converted to cash at any time.

Canada Savings Bonds can be purchased from financial institutions or investment dealers in denominations as low as $100. The interest may be more or less than GIC's and term deposits.

Canada Savings bonds should be included in most investor's portfolios because ofthe relatively attractive level of earning, security and the excellent liquidity.

Securities

The two main types of securities are debt securities and ownership securities. Debt securities include bonds, debentures and notes. It is a form of investment whereby the investor lends money to the issuer of the debt security.

Ownership securities are stocks or shares. The investor is a part owner of the company which issues the shares.

If an investor is not familiar with securities, advice is available from any investment dealer. Normally an investment dealer will not charge a fee for advise other than the commission for purchasing and selling the security.

There are many different strategies and techniques for investing in the stock market. One that has proven consistently profitable over the years is creating a diversified portfolio of shares in senior companies with solid histories of earnings and good prospects for the future. This kind of diversification spreads risk among many companies. You then constantly monitor your holdings, adding new investments that appear to have better than average prospects and selling those that no longer meet your expectations.

You can do this by conducting your own analysis, by depending on your broker for advice or by using professional management through a mutual fund. Some brokerage houses, investment counselling firms and trust companies also have investment management divisions that will look after your portfolio.

(a) Common Shares

Common shares (also referred to as common stock) represent part ownership in a company. It gives the shareholder (investor) a claim to a proportionate share of a corporation's profits. Corporate profits paid to shareholders as dividends provide more favourable tax treatment than interest earnings. The size of a dividend payment is decided by the directors of the company but will relate to the overall profitability of the business. Dividends are subject to special treatment under the Income Tax Act (refer to Section IV).

Common shares are most commonly traded (bought and sold) on public stock exchanges. However, shares may be bought and sold by private negotiation if they are not traded on a public stock exchange. The sale and purchase of shares establishes a price. Share prices may rise or fall because of the interpretation buyers and sellers have of general economic conditions and the corporation's profit potential. If the value of shares increases, the investor receives a capital gain. A capital loss occurs if share values decrease.

The total earnings from investments in common shares is comprised of dividend income and capital gain (loss) income. Normally investors expect to receive the greatest earnings from capital gain.

Common shares investments are known as relatively risky investments, however, there is more potential for greater total returns. Further, within common shares there is a broad range of investment risk, from highly speculative shares to relatively secure shares. High grade investment shares provide regular dividend payments with stable or gradually increasing share values. Speculative shares normally provide no current dividend payments but instead have the potential for sizeable capital appreciation. The risk of loss of equity on these shares is also quite high.

In the event that a company is dissolved or declares bankruptcy, the common shareholders are the last to be paid out. In the case of bankruptcy common shareholders may recover little or perhaps none of their investment.

b) Preferred Shares

Preferred shares have additional rights not provided on common shares. The most common extra right is that of receiving a predetermined rate of dividends from the corporation's earnings before any dividends are paid on common shares. The dividend may also be cumulative in that if corporate profits are too small to pay the stated dividend in one year, the dividends are accumulated and payable when profits are realized. In addition, if a corporation is dissolved preferred shareholders are entitled to the recovery of their investment prior to common shareholders. Normally preferred shareholders are not entitled to any voting rights in the company's affairs.

Preferred shares are generally a less risky investment than common shares. The greatest return is from dividends rather than capital appreciation. Dividends on preferred shares are subject to the normal dividend tax treatment.

The preferred market can seem complicated for the novice because of the different types of shares available. What they have in common, at least when issued by major companies, is that they trade on stock exchanges just like common stocks. The following are some of the types of preferred shares available.

Straight preferred: These do not carry a maturity date and are, in effect, a perpetual security. Prices of straight preferred are most sensitive to changes in interest rates. They can be volatile in periods of sharply changing rates, but are extremely attractive in periods of high rates - particularly if it appears the rates will fall.

Retractable preferred: These give the holder the right to redeem the shares at a specific data for par value. This is an attractive provision as it protects investors against a sharp increase in interest rates. Retractable preferred are a good choice in periods when the direction of interest rates is uncertain.

Floating-rate preferred: These have an interest rate that floats with changes in the prime rate. Floating-rate preferred are the best bet during periods of rising interest rates.

Fixed floating-rate preferred: These have a fixed rate for several years then a floating rate. These give some protection to investors against rising rates.

Convertible preferred: These are convertible into common stock. Convertibles, particulary those issued by utilities, are popular with those who invest for income. In the short term, the convertible preferred pays a higher dividend than the common share. But in the longer term, there is a high probability that the common dividend will increase to a point that exceeds the preferred dividend. At that point investors would convert their convertible preferred to common shares.

The fact that preferred dividends are more certain than common stock dividends is a big plus for investors who want to maximize after-tax income. Even so, not every investor holds preferred for income. Some buy those with dividends in arrears as speculative instruments, hoping for capital gains if the company pays past dividends. But whatever the reason for investing, don't lose sight of the fact that shares of any sort are not as safe as government bonds. As a result, you must monitor your holdings carefully. If you are not prepared to do this, consider investing in preferred through a mutual fund whose professional manager will decide what stocks have the best potential.

(c) Bonds and Debentures

Bonds and debentures are certificates of indebtedness issued by a government (federal, provincial, or municipal) or a corporation. A bond is normally secured by a specified general pledge of assets. In general, bonds are a more secure investment than debentures, however, the credit rating of the institution issuing the bond or debenture is more important in determining the level of risk.

Bonds and debentures are usually issued in multiples of $1,000 with a stipulated coupon (interest) rate. For example, a bond with a 6% coupon will return $60 of interest each year on a bond with a $1,000 par value (issue price).

An investor may purchase or sell bonds on the open market. Bond prices may increase or decrease in relation to their par value because of a general interest rate change. A fall in general interest rates will cause bond prices on the open market to rise in relation to their par value while an increase in general interest rates will cause bond prices to fall. Bonds with longer maturities are the most sensitive to changing interest rates.

The return or yield of a bond purchased in the open market at a discount or a premium to the par value will depend on the coupon rate and the gain or loss of capital over the term of the bond. For example, if a 7% coupon bond due in eight years can be purchased for $800 (par value is $1,000), the investor will receive interest earnings of $70 per year on the investment of $800. He will also earn a capital gain of $200 ($1000 - $800) as the bond can be redeemed for $1000 at the maturity date and the original purchase price was $800. The interest earnings of $70 per year plus the present value of the deferred gain of $200 provides an effective current yield to maturity of 10.5%. The value of a bond will continue to change as general interest rates move higher or lower and as the bond moves closer to the date at which it can be redeemed.

Investment dealers have tables to determine the yield of a bond based on its coupon rate, years to maturity and its market value in relation to the par value.

Bonds and debentures carry a moderate to low degree of risk and will vary depending on the institution which issues the security. Investors can expect good earnings mainly through interest as well as limited potential for capital appreciation. Capital gain or loss is determined primarily by changing general interest rates in the economy.

Mutual Funds

Mutual funds are investment companies that pool the investment funds of many investors and reinvest those funds in various securities. An investment in a mutual fund is a method of acquiring professional management, for a fee, for one's investment funds. An investor can redeem his mutual fund investment at any time and will receive a proportionate share of the equity in the fund.

Mutual funds may have a policy of

investing in only one type of security (e.g. corporate bonds or common stock) or it may have a policy of spreading its investment funds among many alternative investments. Consequently, an investor will encounter different degrees of risk depending on the mutual fund selected.

Investors should check the past performance of several mutual funds before selecting the fund in which they invest funds.

Mutual funds are available through a number of sources. Some are offered through independent mutual fund dealers and stockbrokers who deal in funds offered by several fund management groups. Others are offered directly by their managers through affiliates or direct sales forces. Most major banks and trust companies also offer families of funds, while major insurance companies offer mutual funds or segregated funds that are similar to mutual funds.

Funds sold through a sales force are generally sold one of two ways: with an acquisition fee or commission that is paid to the dealer and salesperson and which reduces the amount of capital available for investment; or with a redemption fee which declines with the time the investment is held.

Given the choice, most investors choose the redemption fee alternative because it is often less expensive and because all of an investor's money is invested in the fund. If you purchase a fund with a redemption fee, the fund company pays a sales commission fee to the broker or dealer. With many funds the redemption fee declines over time. For example, if you redeem within a year of purchase you will be charged a fee of about 5 per cent; different funds have different schedules. If you redeem in the second year, you could be charged 4.5 per cent. If you redeem after say, six years, you might not be subject to any redemption fee. Some fund groups allow you to switch from fund to fund within the group without triggering redemption fees. You only pay redemption fees if you withdraw you money out of the fund group.

Front-end loads or acquisition fees usually range up to 9 per cent, with a sliding scale of reductions for larger purchases. For example, the maximum commission on a $50,000 purchase might be 5 per cent. In addition, virtually every fund allows commissions to be negotiated, which gives brokers the latitude to adjust fees to be competitive and to reflect the level of service provided.

If you invest $1,000 in a fund that charges a front-end commission and require a lot of advice, don't expect a reduction in the commission. But if you invest $50,000 and require little service or information from a financial advisor, you should be able to negotiate a lower fee.

Funds sold directly by fund management companies, as well as those sold by bank and trust companies, are generally "no-load" funds, meaning they are sold without a commission. With no-load funds, all your money goes to work for you. However, you are generally on your own as far as advice is concerned.

The Financial Times of Canada publishes a survey every month and a more comprehensive survey twice a year of investment funds, which includes short and long-term rates of return for about 600 funds.

Registered Retirement Savings Plans - R.R.S.P's

Retirement savings plans which are registered with Revenue Canada enable an individual to reduce his immediate taxable income within certain limits and build a retirement fund. Many financial institutions (e.g. banks, credit unions, life insurance, trust, and investments investmentcompanies) are authorized to handle registered retirement savings plans (R.R.S.P.).

They may offer one or more plans depending on where they invest the money received. This can include bonds, preferred or common shares of Canadian and non-Canadian corporations (subject to certain restrictions), first mortgages, and interest bearing investments.
Registered Retirement Savings Plans may or may not be insured by the Canada Deposit Insurance Corporation. Usually the rate of return is higher for higher risk investments. The risk can be somewhat offset if the investment is insured by CDIC. Before purchasing an R.R.S.P. an investor should determine if CDIC insures the investment.

Investors may establish and manage their own R.R.S.P. investments in what is called a "Self-Administered Plan". A trustee must be hired to make the investment transactions. Since a fee is charged by the trustee for its services, a large investment portfolio in a Self-Administered Fund is required to offset the fee.

Funds withdrawn from an R.R.S.P. are taxable in the year in which they are withdrawn. Since 1986, partial withdrawals from existing R.R.S.P.'s are permitted. The partial withdrawal is taxable income, while the balance remaining in the R.R.S-.P. continues to be sheltered from taxation. An R.R.S.P. must be amended to allow partial withdrawals.

A taxpayer must by the end of the year in which he/she reaches age 71, withdrawn all funds from R.R.S.P. investments. The income received from a R.R.S.P. investment will be taxable. There are a number of options that can be used to average this income over a several of years. These options are:

a) A life annuity which returns a minimum of one payment per year for life. A life annuity may be purchased individually or jointly with payments being made for the life of the individual or individuals.

b) A guaranteed term annuity which makes payments for a specified number of years and pays out the balance to the estate should the taxpayer die before the end of the term.

c) An annuity with a term in length equal to 90 minus the taxpayer's age.

d) A registered retirement income fund which pays out an increasing amounts each year up to the taxpayer's 94th birthday. At age 94 and for subsequent years, the minimum payments will be 20 per cent of the value of the R.R.I.F at the beginning of each year. Any balance remaining at death (before age 90) is paid to the taxpayer's estate.

Generally, as guaranteed options are added to the annuity contract, the annual payments will become smaller. The life annuity option provides the taxpayer the most income protection, while guaranteed term option provide more protection for the taxpayer's equity in case of death.

R.R.S.P. contributions for 1991 and beyond are subject to number of contribution limits. The maximum annual tax free contribution cannot exceed the lesser of 18% of earned income in the previous year and $11,500.00 for 1991.

The $11,500 limit for 1991 R.R.S.P. contributions is scheduled to rise to $12,500 for 1992 and 1993 and 1,000 per year for 1994 through 1996 as follows:

Year	R.R.S.P. dollar limit	Earned income needed for maximum contribution
1990	$ 7,500	$37,500 (1991)
1991	11,500	63,889 (1990)
1992	12,500	69,444 (1991)
1993	12,500	75,000 (1992)
1994	13,500	75,000 (1993)
1995	14,500	80,557 (1994)
1996	15,500	$86,111 (1995)

After 1996, the dollar limits are supposed to be indexed to increases in the average industrial wage.

As an example the 1991 the maximum annual tax free contribution will be the stated dollar amount ($11500) or 18% of the prior year (1990) earned income. There is a one-year time lag in the dollar amount compared to the income maximum. The 1991 limit will be $11,500 or 18% of 1990 income, so that the 11,500 limit is reached at a 1990 income of $63,-889.

Starting in the 1992 taxation year, a taxpayers contribution limit will be the amounts computed under the general new system rules (as above), plus "unused R.R.S.P. contribution room" for 1991. As this new system matures, this unused R.R.S.P. contribution room builds up, as the unused contribution amount for each year may be carried forward seven years.

The taxpayer's unused R.R.S.P. contribution room, subject to certain restrictions, is the amount the taxpayer could have contributed for a particular year starting with 1991, less the amount properly deducted for that year for contributions to the taxpayer's and spousal R.R.S.P..

A husband may contribute all or part of his allowable amount to an R.R.S.P. for his wife. This allows a husband and wife to split their retirement income and usually reduces the total tax payable since they will normally have a higher total deductions as individuals than as a couple. For example, if both husband and wife have life annuities purchased with R.R.S-.P. funds, they could each use the $1,000 pension income deduction for which the annuity payments qualify. If the wife does not have a plan, only the husband could use this deduction. Income splitting between spouses normally can result in significant income tax savings if planned for properly.

At death, the fair market value of a Registered Retirement Savings Plan, Registered Retirement Income Fund or annuity is taxable income to the estate. However, if the benefits are transferred to a spouse or dependent child or grandchild the tax is deferred.

The main benefit of an R.R.S.P. is that the individual's contributions are invested in such a way that the contributions and accumulated profits of the plan are not taxable until withdrawn. It is important, however, to note that registered savings plans are not assignable and, therefore, cannot be used as collateral when borrowing money, and that withdrawals from a R.R.S.P. plan are taxable. A withdrawal by a spouse from a spousal R.R.S.P. within three years of a taxpayer's contribution, will be taxed as income of the taxpayer.

The decision to invest in an R.R.S.P. must take into consideration all of the investment options for the operator's money. If a farmer can profitably expand or improve his farm business an R.R.S.P. may be of little benefit, especially if he is in a lower income tax bracket. A farmer may gain the same income tax deduction by buying farm inputs, such as fertilizer, as he would for investing the same amount in a R.R.S.P., and the farm inputs may be a better investment.

Since there are many different options available it is advisable to compare the plans of several companies to find the one most suitable for the individual circumstances. Factors to consider are the loading fees when the plan is purchased, annual service charges, penalties for deregistering, notice required prior to withdrawing from the plan and past performance of the plan. It may be important whether the company handles the purchases of a life annuity or if the plan holder does this.

Real Estate

Real Estate refers to land and improvements located on it. Real Estate may be purchased for the purpose of producing rental income and/or capital gain. Examples of Real Estate investments are duplexes, townhouses, apartment buildings, commercial and industrial property.

Real Estate may be purchased to operate a business for profit or potential capital gain. For example, the purchase of a motel, restaurant or retail store could be an investment as well as a producer of income.

Real Estate investments are a good hedge against inflation. Their values usually keep pace with inflation. However, the investment is more difficult to liquidate

and a greater level of administration and management is required to maintain a profitable investment.

Life Insurance

Permanent life insurance is an investment since interest and dividends are paid on the premiums. However, the investor should carefully compare the returns available to determine if other investments could be more profitable. Term insurance is not an investment, although it is an excellent way of providing protection for the family breadwinner.

As protection for dependants, life insurance is a valuable estate planning tool especially for young farmers who have low equity and have important family responsibilities. The cost of life insurance increases with age. The need for life insurance usually decreases as net worth increases and a person ages.

Art, Antiques and Collectibles

Most people who "invest" in art, antiques and collectibles do so for the pride, joy and satisfaction of ownership, not only for monetary gain. Many hobbyists enjoy seeking out articles of interest, adding to their collections and owning rare, unusual, nostalgic or historical items.

In building their collections, hobbyists may earn substantial capital gain. The common investments are stamps, coins, antiques, books, paintings, drawings, objects of art, silver, porcelain, jewellery, classic cars and wine. There are also more unusual investments such as antique farm equipment, tools, barbed wire, telephone line insulators, and toys.

To invest wisely in this area, the investor must be well-informed about the particular article he buys.

Commodities

Commodity exchanges (futures markets) exist to shift the risk of ownership of commodities and to improve the overall performance in the marketing of a commodity. On a commodity exchange, contracts for future delivery or acceptance of delivery of a commodity of a fixed quantity and quality are bought and sold. The trading establishes a price. Prices of futures contracts can change quickly and by large amounts, which provides an opportunity to make or lose money.

Hedgers, as well as speculators, use the commodity markets. A hedger either presently owns the physical commodity or will own the physical commodity at some date in the future. By buying or selling a futures contract, a hedger can eliminate the risk of losing money on the commodity he now owns or will eventually own.

Commodity market speculators do not own commodities. They hope to realize a profit on a futures transaction by buying a contract now and later selling it. Substantial gains and losses can be realized on future transactions. It is a highly speculative investment alternative. A great deal of knowledge of commodity markets and buying and selling strategies is necessary to make profits as a commodity speculator.

Mortgages

Mortgages are an investment alternative that are similar in nature to bond investments. Interest returns are relatively attractive on first mortgages. Second mortgages provide higher returns but there is more risk.

Mortgages can be difficult to liquidate. The mortgage may have to be sold at a discount if interest rates have risen since the mortgage was granted. For this reason a mortgage is a poor hedge against inflation. However, if interest rates declined a premium could be earned if the mortgage was sold.

A major disadvantage of a mortgage is the time and cost for foreclosure if the mortgagor defaults on payments.

Tax Shelter Investment

Tax shelters such as Canadian films, MURB's and oil and gas research and development should be considered in the same way as any other investment. The immediate tax savings are a consideration in investing in a tax shelter, but future earnings are necessary to make the investment attractive. Always compare investments on an after-tax basis.

Recent changes to the Income Tax Act has resulted in tax shelters being less attractive as an investment. The Income Tax Act is complex in this area and advise should be obtained from a qualified tax advisor before investing in a tax shelter.

Labour-Sponsored Venture Capital Funds

Saskatchewan residents may purchase shares in a Labour-Sponsored Venture Capital Fund and earn both federal and provincial tax credits. Labour-sponsored venture capital funds are similar to a mutual fund with the exception that the fund can only invest in small businesses located in Saskatchewan.

Investments made into labour-sponsored venture capital fund may generate a federal tax credit of 20% of the net cost of shares to a maximum of $700. The government of Saskatchewan provides a similar provincial tax credit. In addition investments in a labour-sponsored venture capital fund is eligible as a R.R.S.P. contribution.

Net Income Stabilization Account (NISA)

The NISA program was designed as a long-term safety net for farmers, where money is put aside in good years and can be drawn out in years of low income. Farmers can deposit up to two per cent of eligible net sales to a maximum of $5,000 into an individual account. This deposit is matched by the federal and provincial governments. The deposits made by farmers earn an interest bonus of 3 per cent. The deposits are not tax deductible and will not be taxable when withdrawn. However, the government's contribution and accrued interest on all funds will be taxable when withdrawn.

As an additional incentive, farmers may make deposit into this fund up to a maximum of 20% of eligible sales. These deposits are not matched, but are eligible for the interest bonus of 3 per cent per year.

Withdrawals from this account can be made when net sales after eligible expenses is less than the average for the previous five years. Payments from this account can also be obtained when net income from all sources falls below $10,000. On retirement the fund can be withdrawn as lump sum or in a series of payments over five years.

More information on the NISA program can be obtained from Communication Division, Grains and Oilseeds Branch, Agriculture Canada telephone (204)983-8359 or (613)996-4913.

Table 1
Characteristics of Investments

Low - L
Medium - M
High - H

	Income	Capital Gain Potential	Liquidity	Risk	Administration
Savings Account	L	L	H	L	L
Term Deposits	M	L	H	L	L
Guaranteed Investments Certificates	H	L	L	L	L
Canada Savings Bonds	M	L	H	L	L
Securities:					
-Common Shares	L	H	H	H	M
-Preferred Shares	M	M	H	M	M
-Bonds or Debentures	H	L	L	M	L
Mutual Funds	M	M	M	M	M
Single Premium Deferred Annuities	H	L	L	L	L
Real Estate	M	H	L	H	H
Life Insurance	L	L	M	L	L
Art, Antiques & Collectibles	L	H	L	H	H
Commodity Markets	L	H	H	H	H
Mortgages	H	L	L	L	M

Selecting Investments

There is no single answer to the question "What is the best investment?" Every person has different needs and attitudes towards such factors as lifestyle and risk.

Table 1 compares most of the investments discussed according to income, capital gain potential, liquidity, risk and administration. Ratings of low, medium and high are assigned to each. For example, a savings account has a low income rating, has low capital gain potential, is high in liquidity, is a low risk, and requires low administration. A guaranteed investment certificate differs from a savings account in that its income potential is high and its liquidity is low. By selecting one of the two investments, there is a trade-off between income and liquidity.

The ratings indicate how the majority of investments in each category perform. Some actual investments in each category may be worse or better than the rating indicated. Before selecting an investment, consider the more detailed information in the previous sections of this bulletin and gain a better understanding from further reading, research and advice from professionals.

The proper type of investment for farmers varies greatly with their individual situation. The five following situations illustrate this:

Beginning Farmers

Young beginning farmers usually have high debt loads and any extra capital is best invested in the farm. They may have excess cash for short periods of time (less than one year). A savings account or term deposit can be used to provide interest earnings on periodic cash surpluses.

The benefits of short term investment is demonstrated in this example. A sum of $10,000 is received on January 2. The money will be needed on May 1 for farm operating costs. A short term deposit for 119 days (January 2 - May 1) at 9.0% will return:

$$\frac{\$10{,}000 \times 9.0\% \times 119}{365} = \$293.42$$

Established Farmers with Periodic Cash Surpluses

Established farmers may have annual cash surpluses which are not needed to purchase yearly inputs. The money may be needed in five years to replace worn out equipment or perhaps to purchase an additional parcel of land. Term deposits, Guaranteed Investment Certificates or Canada Savings Bonds will provide a reasonable and secure return. A portion of the cash could be invested in common or preferred shares. The risk is higher but the potential for gain is higher as well.

Established Farmers with Long Term Cash Surpluses

Established farmers with money that is not required in the farm business should consider investments beyond the farm. These investments will provide some stability and security if the farm business experiences poor years. Consideration should be given
to common and preferred shares, bonds, debentures, mutual funds and real estate. R.R.S.P's should be included to provide an alternative retirement income source and to take advantage of income tax savings.

Several different investments should be selected to give a diversified portfolio. This will minimize risk and provide alternative forms of earnings (interest, dividends, capital gain, profit).

Farmers Preparing for Retirement

Farmers who will retire in five to ten years should consider investments that will provide them with a retirement income to meet their needs. The purchase of a retirement home at this time and renting it out may be considered. It is a good investment during inflationary periods.

R.R.S.P's should be part of the investment portfolio. Both a husband and wife should have R.R.S.P. investments to take advantage of the Pension Income Deduction at age 65 and benefits from income splitting.

Retired Farmers

Farmers about to retire should consider the alternative ways of handling their farm investments as well as other investments. There are three alternatives (or combinations of these) for handling farm assets:

a) The land is leased to provide an annual income. The sale of machinery, equipment and inventories will provide a source of liquid capital to purchase a retirement home, or for the purchase of investments that provide high income and minimize risk.

The investment in land is an excellent hedge against inflation. Since the retired person was previously a farmer, the administration of the rental property will not be difficult.

Remember that landowners who rent land to anyone other than a spouse or child may not qualify for the capital gain rollover under the Income Tax Act if the land is transferred to a child. Landowners may want to consider a custom farming arrangement to avoid this tax problem. The tax implications of capital gains is complex and is fully outlined will be discussed in a later section.

b) If the land (or part of it) is sold, then the funds must be invested to replace the lost income. The emphasis should be on income and minimizing risk when selecting investments. More risky investments could be considered if there is a large amount of funds and there is satisfactory current income.

Another alternative is to sell the land by way of agreement for sale or mortgage. Payments of interest and principal on the agreement for sale or mortgage provide income for the retired farmer. Agreements for sale or mortgages are not liquid. If the land purchaser defaults in payments, it can be difficult and costly in time and money to foreclose. This type of investment is more common in family farm intergenerational transfers.

c) A common situation for retiring farmers is to have large sums of both taxable and non-taxable money from sales of land, buildings, equipment and inventories. Before buying any investment it is very important to shop around and consult knowledgeable people. This process may take some time, therefore, term deposit investment will provide a return until more permanent investments are made.

In selecting investments consider the favourable tax treatment of capital gains and dividend income. Attitudes towards risk and speculation will effect investment decisions. Never rush into investments; take time to consider what is best for your situation and be sure your money is always working for you.

Taxation of Investments

Comparison of Interest, Dividends and Capital Gain

Interest Income received from investments made in and after 1990 must be reported on an annual basis regardless of whether the interest is paid. This rule replaces the triennial reporting requirement that remains in place for investments made before 1990.

Dividends received from taxable Canadian corporations qualify for preferred tax treatment. Dividends must be reported in the year that they are received. The combination of the method of reporting dividend income and a dividend tax credit results in a taxpayer paying less tax on dividend income than on interest income.

The dividend income tax credit has the result of making $1 of dividend income from a Canadian corporation equal, on an after-tax basis, to $1.26 of interest income. This is just a rule of thumb, but usually if your choice is between a bond with a yield of 10 per cent and a preferred or common share yielding a little more than 8 per cent, the share will return more. When properly chosen, shares especially preferred shares have a definite advantage over interest-paying securities because of that higher after tax-return. You may however, not want to include investments earning dividend in you RRSP as the RRSP cannot take advantage of the dividend tax credit.

Capital Gain is the amount received on the sale of an asset which exceeds its original purchase price. Capital gains (or losses) can occur on shares, bonds, real estate, etc. Only seventy five per cent of capital gain is treated as taxable income. In addition, there are capital gain exemptions of $100,000 for all taxpayers and $500,000 special exemption for farmers when dealing with "Qualified Farm Property". The rules setting out the capital gain exemptions are quite complex and are fully covered in the publication "Managing Your Farm Income Tax Plan." These capital gain exemptions will make certain investments much more attractive. An investor's should consult a tax advisor to determine the effect of the capital gain exemption. Investments that produce capital gain should always be considered when off-farm investments are purchased.

Taxation of Rental Income

The net income from rental property is taxable as regular income. Net income is the gross income from rental and other sources less operating costs (including interest on loans and mortgages on the property) and capital cost allowance. A rental loss can be used to offset other income sources subject to restrictions on the amount claimed for capital cost allowance. Capital cost allowance may not be used to create or increase a rental loss.

When rental property is sold, there may be capital gain and recaptured capital cost allowance to bring into income for taxation purposes.

Interest Expenses on Loans to Purchase Investments

Interest on money borrowed to purchase registered retirement savings plans or registered pension plans may not be claimed as an expense for taxation purposes. Interest on loans for other investment purposes may be claimed in full as a tax deductible expense.However, such interest may reduce the capital gains exemption limit.

Glossary of Investment Terms

Accrued Interest	Interest accumulated since the last interest payment date.
Amortization	The calculation of equal payments throughout the repayment period of a loan. The ratio of principal to interest increases but payments remain constant.
Averages and Indexes	Statistical tools that measure the state of the stock market or the economy, based on the performance of stock or other meaningful indicators. For example, the Toronto Stock Exchange and Montreal Stock Exchange Industrial Index, the Consumer Price Index, Dow Jones Industrial Average.
Bid and Asked Prices	The "bid" price represents what a prospective buyer is willing to pay; "asked" price is the price the seller will accept on bonds, stocks and commodity markets. The two prices are referred to as a "Quotation" or "Quote".
Blue Chip Stocks	Stocks of long established companies with consistent dividend performance.
Bond	A certificate as evidence of a debt on which interest is paid for a specific length of time and the face value is repaid by the issuer upon maturity. Assets are pledged as security for the loan.
Capital	1) to a business man it represents the resources (equipment, buildings, etc.) needed to produce a product. 2) to an investor, it means the financial assets he has invested.
Capital Stock	Common and preferred shares which represent an ownership interest in a limited company.

Certificate	The document which is evidence of ownership of a bond or stock.
Collateral	Assets pledged to secure repayment of a loan.
Commission	The fee for buying and selling securities or property.
Common Stock (Common Shares)	Securities representing ownership in corporation with voting privileges.
Convertible	A privilege added to some bonds, debentures, or preferred shares so that they may be exchanged for a specified number of common shares in the same company.
Coupon	Entitles the holder to a specified interest payment when clipped from a bond certificate and presented at a bank on or after its due date.
Investment Dealer	An individual or securities firm usually acting as a principle, i.e., owning the securities he buys and sells unlike a stockbroker who only acts as an agent on behalf of clients. Dealers may also create and sell issues of stocks and bonds.
Debenture	A certificate of indebtedness of a government or company backed only by the general credit of the issuer.
Dividend	An amount distributed out of a company's profit to its shareholders in proportion to the number of shares they hold.
Equity	The difference between the assets and the liabilities of a business.
Face Value	The value of a bond or preferred share that appears on the face of the certificate and is ordinarily the amount the issuing company promises to pay at maturity. It is no indication of market value.
Interest	Payment a borrower pays a lender for the use of his money.
Investing	a) to put money into a business, real estate, bank account, stocks, etc. for the purpose of obtaining an income or profit. b) to spend time, effort, etc. with the expectation of some satisfaction.

Investor

One whose principal concern in the purchase of an investment is to minimize risk, in contrast to the speculator who is prepared to accept calculated risk in the hope of making better than average profits and the gambler who is prepared to take even greater risks.

Leading Indicators

A selection of statistics that indicate trends in business and in the economy as a whole. These relate to employment, capital investment, business starts and failures, profits, stock prices, some commodity prices, etc.

Limited Liability

The word "limited" or "ltd." at the end of a Canadian company's name means the shareholders are not liable for company debts beyond what they paid for their shares.

Liquidity

The ability of an investment to be converted into cash.

Long Term Bond

A bond maturing after more than 15 years.

Margin

The amount paid by the customer when he uses credit from the broker to buy a security, the balance being advanced by the broker against acceptable collateral.

Maturity

The date on which a bond or debenture comes due and is to be paid off.

Medium Term Bond

A bond maturing in 3 to 15 years.

Member firm

A stock brokerage firm or investment dealer having a seat on a particular stock exchange or membership in the Investment Dealers Association of Canada.

New Issue

A stock or bond sold by a corporation or government for the first time to raise money for various purposes.

Note	A corporation's unsecured promise to pay.
Par Value	The stated face value of a bond or stock. Bonds and stocks are traded in the market at market value which may be greater than the par value (premium to par), less than par value (discount to par value) or at the same value as the par value (at par value). Bonds are usually redemptible that maturity at par value.
Portfolio - (investment portfolio)	A group of investments; stocks, bonds, etc. held by an investor (individual or company).
Preferred Stock	A class of share that entitles the owners to certain preferences over common shareholders.
Premium	The amount by which the market price of a preferred stock or bond is above its par value.
Prospectus	A legal document prepared in compliance with the provincial securities commission requirements describing the securities offered for sale to the public.
Proxy	Written authorization given by a shareholder to someone else, who need not be a shareholder, to represent him and use his share voting privilege at a shareholder's meeting.
Quotation or Quote	The highest bid to buy and the lowest offer to sell a security at a given time. For example: A quote of 45 1/4 - 45 1/2 means 45 1/4 is the highest price the buyer will pay and 45 1/2 the lowest price the seller will take.
Rally	A brisk rise following a decline in the general price level of the market or in an individual security.
Redemption Price	The price at which a bond may be redeemed before maturity, at the option of the issuing company.
Registered Tax Deferral Savings Plans	Government approved savings plans (such as RRSP's) to which funds contributed by individuals are tax deductible within certain limits. Earnings may accumulate tax free until de-registration when all funds become taxable.
Retained Earnings	The portion of net profits not paid out as dividends.
Securities	1) something given as a pledge of repayment, fulfilment of a promise, etc., guarantee. 2) any evidence of debt or ownership, especially a stock or bond certificate.

Securities Act	A provincial Act administered by the Securities Commission in each province, which sets down the regulations under which securities may be issued to the public.
Short Term Bond	A bond maturing within three years.
Speculator	One who is prepared to accept calculated risks in the marketplace for short term capital gain.
Spread	The gap between the bid and asked price.
Stockbroker	One who acts as an agent in the buying and selling of securities, and charges a commission for his services.
Stock Dividend	Instead of a money dividend paid on common stock, the shareholder receives new common shares. His proportion of ownership of the company still remains the same though, but it is worth more.
Treasury Bills	Short-term government debt, usually issued in large denominations and sold chiefly to large institutional investors. They are sold at a discount so that the difference between issue price and par value at maturity represents the lender's gain instead of interest.
Voting Right	The stockholder's right to vote his stock in the affairs of his company. Most common shares have one vote each. The right to vote may be delegated by the stockholder to any person (See Proxy).
Yield (Bond and Stock)	Return on an investment. A stock yield is the annual dividend expressed as a percentage of the current market price. A bond yield is more complicated involving annual interest payments and change in market value.

Appendix A

Reference Books on Investments

1. How to Invest in Canadian Securities. The Canadian Securities Institute, 1978. Toronto, Ontario.

2. Brown, J.J. Start with $1000. Toronto, Ontario: Langmans Canada Limited, 1960.

3. Fullerton, Douglas H. The Bond Market in Canada. Toronto, Ontario: Carswell Co. Ltd., 1962.

4. Shullman, Morton. Anyone Can Still Make a Million. Toronto, Ontario: McGraw-Hill Ryerson Limited, 1972.

5. Catherwood, Robert. Your Money-How to Make the Most of It. Toronto, Ontario: The Financial Post, 1969.

6. Doherty, John G. and Pritchard, Timothy. Bulls, Bears and Sheep - A Profit Strategy for the Small Investor. Toronto, Ontario: McClelland and Stewart Limited, 1971.

7. Goldring, C. Warren. Your Guide to Investing for Bigger Profits. Toronto, Ontario: McLean-Hunter Limited, 1976.

8. Perry, Robert. The Financial Post Money Management Book. Toronto, Ontario: McLean-Hunter Limited, 1976.

9. Janeway, E. What Shall I Do With My Money. New York, New York: David MacKay Company Inc., 1970.

10. Granger, Alix. Investing Profitably in Canada. Vancouver, British Columbia: J.J. Douglas Limited, 1975.

11. Investment Terms and Definitions. Toronto, Ontario The Canadian Securities Institute, 1976.

12. Mariom, Lucien F. Understanding Investment - A Primer for Wives, Widows and Other Capitalists. Seattle, Washington: The University of Washington Press, 1964.

13. Friedland, Seymour and Kelman, Steven - Investment Strategies. The Financial Times Personal Library Series, The Financial Times of Canada, Toronto, Ontario

14. The Financial Post - Toronto, Ontario-weekly newspaper.

15. The Globe and Mail-Report on Business - Toronto Ontario-daily newspaper.

Appendix B

Compound Interest Tables

Tables II and III can be used to calculate the growth of an investment for various interest rates and years of investment. Table IV can be used to determine the income from an annuity.

Table II indicates the future value of $1.00 invested today at various interest rates and investment periods. For example, $1.00 invested now at 8% will accumulate to $3.172 in 15 years, because of interest earnings and the compounding effect of interest earnings. For investments other than $1.00, multiply the factor by the size of the investment.

Table III indicates the future value of $1.00 invested every year at various interest rates and periods of time. For example, if $1.00 was invested every year for 10 years at an interest rate of 10%, it will accumulate with compounding to $15.937 at the end of 10 years.

Table IV can be used to determine annuity payments. For example, if an investor invested $50,000 into an annuity today with 20 annual payments and with an interest rate of 9%, the annual income would be 50,000 x .1095 = $5,475.

The Rule of 72 can be used to determine the number of years it would take an investment to double itself at various interest rates. When the number 72 is divided by the interest rate, the result in the number of years for a doubling to occur. If the interest rate was at 6%, an investment would double itself in 72 divided by 6 = 12 years.

TABLE II

Accumulated Value of $1 (1 Payment Only)

Interest Rate (%)

YEARS	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800
2	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.3689	1.3924
3	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.6016	1.6430
4	1.2156	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	1.8739	1.9388
5	1.2736	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.1924	2.2878
6	1.3401	1.4185	1.5007	1.5867	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.5652	2.6996
7	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.0012	3.1855
8	1.4774	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8526	3.0590	3.2784	3.5115	3.7589
9	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	4.1084	4.4355
10	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	4.8068	5.2338
11	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	5.6240	6.1759
12	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4984	3.8960	4.3345	4.8179	5.3503	5.9360	6.5801	7.2876
13	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	7.6987	8.5994
14	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	9.0075	10.1472
15	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	10.5387	11.9737
16	2.1829	2.5403	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.7480	12.3303	14.1290
17	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9861	9.2765	10.7613	12.4677	14.4265	16.6722
18	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	6.5436	7.6900	9.0243	10.5752	12.3755	14.4625	16.8790	19.6733
19	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.1974	12.0557	14.2318	16.7765	19.7484	23.2144
20	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.5231	13.7435	16.3665	19.4608	23.1056	27.3930
21	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.8038	13.0211	15.6676	18.8215	22.5745	27.0336	32.3238
22	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.1003	14.7138	17.8610	21.6447	26.1864	31.6293	38.1421
23	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.0263	13.5523	16.6266	20.3616	24.8915	30.3762	37.0062	45.0080
24	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.2392	15.1786	18.7881	23.2122	28.6252	35.2364	43.2973	53.1090
25	3.3864	4.2919	5.4274	6.8485	8.6231	10.8347	13.5855	17.0001	21.2305	26.4619	32.9189	40.8742	50.6578	62.6686
26	3.5557	4.5494	5.8074	7.3965	9.3992	11.9182	15.0799	19.0401	23.9905	30.1666	37.8568	47.4141	59.2697	73.9490
27	3.7335	4.8223	6.2139	7.9881	10.2451	13.100	16.7386	21.3249	27.1093	34.3900	43.5353	55.0004	69.3455	87.2598
28	3.9201	5.1117	6.6488	8.6271	11.1671	14.4210	18.5799	23.8839	30.6335	39.2045	50.0656	63.8004	81.1342	102.9666
29	4.1161	5.4184	7.1143	9.3173	12.1722	15.8631	20.6237	26.7499	34.6158	44.6831	57.5755	74.0085	94.9271	121.5005
30	4.3219	5.7435	7.6122	10.0627	13.2677	17.4494	22.8923	29.9600	39.1159	50.9502	66.2118	85.8499	111.0647	143.3706
40	7.0400	10.2857	14.9744	21.7245	31.4094	45.2593	65.0009	93.0510	132.7816	188.8835	267.8635	378.2712	533.8687	750.3783
50	11.4674	18.4202	29.4570	46.9016	74.3575	117.3908	184.5648	289.0022	450.7359	700.2330	1083.7574	1670.7038	2566.2153	3927.3569

Example - $100.00 invested now at 8% compound annually for 30 years would accumulate to (10.062) ($100) = $1,006.27.

TABLE III

Accumulated Value of $1 (1 Payment Per Year)

Interest Rate (%)

YEARS	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.1700	2.1800
3	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	3.5389	3.5724
4	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	5.1405	5.2154
5	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	5.4803	5.6101	6.7424	6.8771	7.0144	7.1542
6	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	9.2068	9.4419
7	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.0890	10.4047	10.7305	11.0668	11.4139	11.7720	12.1415
8	9.5491	9.8975	10.2598	10.6366	11.0285	11.4359	11.8594	12.2997	12.7573	13.2328	13.7268	14.2401	14.7733	15.3270
9	11.0266	11.4913	11.9780	12.4876	13.0210	13.5795	14.1640	14.7757	15.4157	16.0853	16.7858	17.5185	18.2847	19.0859
10	12.5779	13.1808	13.8164	14.4866	15.1929	15.9374	16.7220	17.5487	18.4197	19.3373	20.3037	21.3215	22.3931	23.5213
11	14.2068	14.9716	15.7836	16.6455	17.5603	18.5312	19.6514	20.6546	21.8143	23.0445	24.3493	25.7329	27.1999	28.7551
12	15.9171	16.8699	17.8884	18.9771	20.1407	21.3843	22.7132	24.1331	25.6502	27.2707	29.0017	30.8502	32.8239	34.9311
13	17.7130	18.8821	20.1406	21.4953	22.9534	24.5227	26.2116	28.0291	29.9847	32.0887	34.3519	36.7862	39.4040	42.2187
14	19.5986	21.0150	22.5505	24.2149	26.0192	27.9750	30.0949	32.3926	34.8827	37.5811	40.5047	43.6720	47.1027	50.8180
15	21.5786	23.2760	25.1290	27.1521	29.3609	31.7725	34.4054	37.2797	40.4175	43.8424	47.5804	51.6595	56.1101	60.9653
16	23.6575	25.6725	27.8880	30.3243	33.0034	35.9497	39.1899	42.7533	46.6717	50.9804	55.7175	60.9250	66.6488	72.9390
17	25.8404	28.2129	30.8402	33.7502	36.9737	40.5447	44.5008	48.8837	53.7391	59.1176	65.0751	71.6730	78.9792	87.0680
18	28.1324	30.9056	33.9990	37.4502	41.3013	45.5992	50.3959	55.7497	61.7251	68.3941	75.8364	84.1407	93.4056	103.7403
19	30.5390	33.7600	37.3790	41.4463	46.0185	51.1591	56.9395	63.4397	70.7494	78.9692	98.2118	98.6032	110.2846	123.4135
20	33.0660	36.7856	40.9955	45.7620	51.1601	57.2750	64.2028	72.0524	80.9468	91.0249	102.4436	115.3797	130.0329	146.6280
21	35.7192	39.9927	44.8652	50.4229	56.7645	64.0025	72.2651	81.6987	92.4699	104.7684	118.8101	134.8405	153.1385	174.0210
22	38.5052	43.3923	49.0057	55.4568	62.8733	71.4027	81.2143	92.5026	105.4910	120.4360	137.6316	157.4150	180.1721	206.3448
23	41.4305	46.9958	53.4361	60.8933	69.5319	79.5430	91.1479	104.6029	120.2048	138.2970	159.2764	183.6014	211.8013	244.4868
24	44.5020	50.8156	58.1767	66.7648	76.7898	88.4973	102.1742	118.1552	136.8315	158.6586	184.1678	213.9776	248.8076	289.4945
25	47.7271	54.8645	63.2490	73.1059	84.7009	98.3471	114.4133	133.3339	155.6196	181.8708	212.7930	292.1049	342.6035	
26	51.1134	59.1564	68.6765	79.9544	93.3240	109.1818	127.9988	150.3339	176.8501	208.3327	245.7120	290.0883	342.7627	405.2721
27	54.6691	63.7058	74.4838	87.3508	102.7231	121.0999	143.0786	169.3749	200.8406	238.4993	283.5688	337.5024	402.0323	479.2211
28	58.4026	68.5281	80.6977	95.3388	112.9682	134.2099	159.8172	190.6989	227.9499	272.8892	327.1041	392.5028	471.3778	566.4809
29	62.3227	73.6398	87.3465	103.9659	124.1354	148.6309	178.3971	214.5828	258.5834	312.0937	377.1697	456.3032	552.5121	669.4475
30	66.4388	79.0582	94.4608	113.2832	136.3075	164.4940	199.0209	241.3327	293.1992	356.7868	434.7451	530.3117	647.4391	790.9480
40	120.7998	154.7620	199.6351	259.0565	337.8824	442.5926	581.8261	767.0914	1013.7042	1342.0251	1779.0903	2360.7572	3134.5218	4163.2130
50	209.3438	290.3359	406.5289	573.7702	815.0836	1163.9085	1668.7712	2400.0182	3459.5071	4994.5213	7217.7163	10435.6488	15089.5017	21813.0937

Example - $100.00 invested per year over a 20 year period at annual compound interest rate of 7% would accumulate to (100) (40.9955) = $4,099.55.

TABLE IV

Capital Repayment Factor

Annual Payment That Will Repay A $1 Loan In N Years With Compund Interest On The Unpaid Balance

Interest Rate (%)

YEARS	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	10.1400	1.1500	1.1600	1.1700	1.1800	1.1900	1.2000
2	0.5378	0.5454	0.5531	0.5608	0.5685	0.5762	0.5839	0.5917	0.5995	.6074	.6150	.6231	.6308	.6388	0.6466	0.6546
3	0.3672	0.3741	0.3811	0.3880	0.3951	0.4021	0.4092	0.4163	0.4235	.4308	.4380	.4453	.4526	.4599	0.4673	0.4747
4	0.2820	0.2886	0.2952	0.3019	0.3087	0.3155	0.3223	0.3292	0.3362	.3432	.3503	.3574	.3646	.3717	0.3790	0.3863
5	0.2310	0.2374	0.2439	0.2505	0.2571	0.2638	0.2706	0.2774	0.2843	.2913	.2983	.3054	.3126	.3198	0.3271	0.3344
6	0.1970	0.2034	0.2098	0.2163	0.2229	0.2296	0.2364	0.2432	0.2502	.2572	.2642	.2714	.2786	.2859	0.2933	0.3007
7	0.1728	0.1791	0.1856	0.1921	0.1987	0.2054	0.2122	0.2191	0.2261	.2332	.2402	.2476	.2549	.2624	0.2699	0.2774
8	0.1547	0.1610	0.1675	0.1740	0.1807	0.1874	0.1943	0.2013	0.2084	.2156	.2228	.2302	.2377	.2452	0.2402	0.2481
9	0.1407	0.1470	0.1535	0.1601	0.1668	0.1736	0.1806	0.1877	0.1949	.2022	.2096	.2171	.2247	.2324	0.2402	0.2481
10	0.1295	0.1359	0.1424	0.1490	0.1558	0.1627	0.1698	0.1770	0.1843	.1917	.1993	.2069	.2146	.2225	0.2305	0.2385
11	0.1204	0.1268	0.1334	0.1401	0.1469	0.1540	0.1611	0.1684	0.1758	.1834	.1911	.1989	.2068	.2148	0.2229	0.2311
12	0.1128	0.1193	0.1259	0.1327	0.1397	0.1468	0.1540	0.1614	0.1690	.1767	.1845	.1924	.2005	.2086	0.2169	0.2253
13	0.1065	0.1130	0.1197	0.1265	0.1336	0.1408	0.1482	0.1557	0.1634	.1712	.1791	.1872	.1954	.2037	0.2121	0.2206
14	0.1010	0.1076	0.1143	0.1213	0.1284	0.1357	0.1432	0.1509	0.1587	.1666	.1747	.1829	.1912	.1997	0.2082	0.2169
15	0.0963	0.1030	0.1098	0.1168	0.1241	0.1315	0.1391	0.1468	0.1547	.1628	.1710	.1749	.1878	.1964	0.2051	0.2139
16	0.0923	0.990	0.1059	0.1130	0.1203	0.1278	0.1355	0.1434	0.1514	.1596	.1680	.1764	.1850	.1937	0.2025	0.2114
17	0.0887	0.0954	0.1024	0.1096	0.1170	0.1247	0.1325	0.1405	0.1486	.1569	.1654	.1740	.1827	.1915	0.2004	0.2094
18	0.0855	0.0924	0.0994	0.1067	0.1142	0.1219	0.1298	0.1379	0.1462	.1546	.1632	.1719	.1807	.1896	0.1987	0.2078
19	0.9827	0.0896	0.0968	0.1041	0.1117	0.1195	0.1276	0.1358	0.1441	.1527	.1613	.1701	.1791	.1881	0.1972	0.2065
20	0.0802	0.0872	0.0944	0.1019	0.1095	0.1175	0.1256	0.1339	0.1424	.1510	.1598	.1687	.1777	.1868	0.1960	0.2054
21	0.0780	0.0850	0.0923	0.0998	0.1076	0.1156	0.1238	0.1322	0.1408	.1495	.1584	.1674	.1765	.1857	0.1951	0.2044
22	0.0760	0.0830	0.0904	0.0980	0.1059	0.1140	0.1223	0.1308	0.1395	.1483	.1573	.1664	.1755	.1848	0.1942	0.2037
23	0.0741	0.0813	0.0887	0.0964	0.1044	0.1126	0.1210	0.1296	0.1383	.1472	.1563	.1654	.1747	.1841	0.1935	0.2031
24	0.0725	0.0797	0.0872	0.0950	0.1030	0.1113	0.1198	0.1285	0.1373	.1463	.1554	.1647	.1740	.1834	0.1930	0.2025
25	0.0710	0.0782	0.0858	0.0937	0.1018	0.1102	0.1187	0.1275	0.1364	.1455	.1547	.1640	.1734	.1829	0.1925	0.2021
26	0.0696	0.0769	0.0846	0.1007	0.0925	0.1092	0.1178	0.1267	0.1357	.1448	.1541	.1634	.1729	.1825	0.1921	0.2018
27	0.0683	0.0757	0.0834	0.0914	0.0997	0.1083	0.1170	0.1259	0.1350	.1442	.1535	.1630	.1725	.1821	0.1917	0.2015
28	0.0671	0.0746	0.0824	0.0905	0.0989	0.1075	0.1163	0.1252	0.1344	.1437	.1531	.1626	.1721	.1818	0.1915	0.2012
29	0.0660	0.0736	0.0814	0.0896	0.0981	0.1067	0.1156	0.1247	0.1339	.1532	.1527	.1622	.1718	.1815	0.1912	0.2010
30	0.0651	0.0726	0.0806	0.0888	0.0973	0.1061	0.1150	0.1241	0.1334	.1428	.1523	.1619	.1715	.1813	0.1910	0.2008
40	0.0583	0.0665	0.0750	0.0839	0.0930	0.1023	0.0117	0.1213	0.1310	.1407	.1506	.1604	.1703	.1802	0.1902	0.2001
50	0.0548	0.0634	0.0725	0.0817	0.0912	0.1009	0.1106	0.1204	0.1303	.1402	.1501	.1601	.1701	.1800	0.1900	0.2000

Example - A farmer wishes to buy a truck for $20,000.00 with payments over a 5 year period and interest at 12%. His annual payments will be ($20,000.00 × 0.2774) = $5548.00/yr. for 5 years.